

**PT. CHEIL JEDANG INDONESIA**

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## PRODUCT INFORMATION

No Doc. TEQ-BRS-02-03

We, PT. Cheil Jedang Indonesia, inform that our L-Lysine Monohydrochloride has following specification :

1. Product Name : L-Lysine Monohydrochloride
2. Composition : L-Lysine HCl 99 % min
3. Lysine Base : Not less than 79 %
4. Chemical family : Amino acid (essential)
5. Chemical description :
  - a) Structure formula :
 
$$[ \text{H}_2\text{N} - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH} - \text{COOH} ] \cdot \text{HCl}$$

$\begin{array}{c} | \\ \text{NH}_2 \end{array}$
  - b) Molecular formula :  $\text{C}_6\text{H}_{14}\text{N}_2\text{O}_2 \cdot \text{HCl}$
  - c) Molecular weight : 182.65
6. Strength : Single formula
7. Indication for use : Feed additive
8. Efficiency :
  - a) L-Lysine HCl contribute to growth of animals and it is a building blocks of protein.
  - b) It is artificial supplement for balancing amino acid to animals required level.
  - c) L-Lysine HCl makes animal's meat to be lean fat.
9. Feeding animal :
  - a) Poultry [Layer, Broiler, Turkey and Quail]
  - b) Livestock [Pig, Calf]
  - c) Aquaculture [Trout]

10. Usage and dosage :
- |            |                            |           |
|------------|----------------------------|-----------|
| a) Pigs    | : Piglet [up to 25 Kg]     | 1.5 ~ 2.5 |
|            | Sow                        | 0.5 ~ 1.0 |
|            | Fattening pig feed         | 1.0 ~ 1.5 |
| b) Poultry | : Yellow broiler (all age) | 1.0 ~ 2.5 |
|            | White broiler (all age)    | 1.0 ~ 2.0 |
|            | Laying hen (all age)       | 0.5 ~ 1.0 |
|            | Quail (all age)            | 1.5 ~ 2.5 |
| c) Calves  | : Milk replacer            | 1.0 ~ 1.5 |
|            | [ 60 % skim milk ]         |           |
|            | Milk replacer              | 1.5 ~ 4.0 |
|            | [ Without milk ]           |           |
| d) Fish    | : Trout                    | 1.0 ~ 2.0 |
|            | [ in kg per ton of feed ]  |           |
11. Solubility : 53.6 [ 10 °C ]  
 [ g / 100 g H<sub>2</sub>O ] 95.5 [ 40 °C ]  
 111.5 [ 50 °C ]  
 131.2 [ 60 °C ]  
 142.8 [ 70 °C ]
12. Bulk density : 0.67 ~ 0.75 g/ml
13. Particle mesh size : + 14 = max 3 % ; - 80 = max 8 %
14. Storage condition : Keep in dry condition sheltered from sunlight
15. Explosion classification : No explosive properties material
16. Precaution : No special precaution
17. Side effects, toxic reaction and antidote, (if any) : None
18. Shelf life : 2 (two) years
19. Packaged : 25 Kg net, 3-Ply Kraft Paper Bag with 1-Ply PE  
 500 Kg Ply-Polypropylene Woven Bag with PE laminated  
 800 Kg Ply-Polypropylene Woven Bag with PE laminated  
 18000 ~ 20000 Kg, Bulk container – PE Bulk liner

The above mentioned product does not contain materials of origin and any other harmful substances.

PT Cheil Jedang Indonesia.



**Christoforus BDR**

Quality Control Manager